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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,036	08/13/2001	Akira Yumoto	SON-1854/SOH	8706

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RADER FISHMAN & GRAUER PLLC
LION BUILDING
1233 20TH STREET N.W., SUITE 501
WASHINGTON, DC 20036

EXAMINER

LAO, LUN YI

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/787,036

Applicant(s)
Yumoto

Examiner
Lun-yi Lao

Art Unit
2673



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 21, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-165 is/are pending in the application.
53-54, 58-61, 63-65, 68-81, 88-103, 106-119, 126-141, 144, 146-148 and 155-165.
- 4a) Of the above, claim(s) 3-13, 18-25, 29-31, 33, 34, 38-41, 43-45, 47, 49-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 26-28, 32, 35-37, 42, 46, 48, 52, 55-57, 62, 66, 67, 104, 105, 143 and 145. is/are rejected.
- 7) ☒ Claim(s) 14-17, 82-87, 120-125, and 149-154 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 312001 6) ☐ Other:

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DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of Species II(claims 1-2, 14-17, 26-28, 32, 35-37, 42, 46, 48, 52, 55-57, 62, 66-67, 82-87, 104-105, 120-125, 142-143, 145 and 149-154) in Paper No 8. is acknowledged. The traversal is on the ground(s) that both species I and species II are corresponding to one common special technical feature. This is not found persuasive because even though Species I(figures 5-8, 15-17, 18-24, 26-27) and species II(figures 9-14) both direct to a driving circuit for driving an OLED display, the driving circuit in Species I and Species II are distinctable different. If applicants can submit evidence to prove Species I and Species II are **not** patentably distinct, the examiner can withdraw the restriction requirement.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claims 37, 42, 57, 62, and 42 objected to because of the following informalities:

The limitation of "said display element is connected to the first terminal of said first transistor and further comprising a fourth transistor connected to the second terminal of the first transistor" cited in claims 37, 57 should be changed to "said display element is connected to the

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first terminal of said first transistor and further comprising a fourth transistor connected to the **first** terminal of the first transistor” since the display element(OLED) and the fourth transistor(TFT4) both connected to the same terminal of the first transistor(TFT 1)(see figure 9).

The limitation of “the other end of the capacitor is connected to the second terminal of the said first transistor” cited in claims 42, 62 should be changed to “ **one** end of the capacitor is connected to the **control** terminal of the said first transistor”(see claim 28 and figure 9).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 104 and 142 are rejected under 35 U.S.C. 102(b) as being anticipated by Stewart et al(5,952,789).

As to claims 1, 104 and 142, Stewart et al teach a current drive circuit for driving a display comprising a control line(Select line); a signal line(Data line); a converting part(T1, C1) for converting a current to a voltage level and holding the same and a drive part(vdd, T2, C1) for

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converting the held voltage signal to a current signal and outputting the drive current(see figures 7, 9; column 8, lines 21-33 and lines 39-48).

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1, 2, 26-28, 32, 35-37, 42, 46, 48, 52, 55-57, 62, 66-67, 104-105, 142-143 and 145 are rejected under 35 U.S.C. 102(e) as being anticipated by Dawson et al(6,229,506).

As to claims 1, 2, 26-28, 32, 35-37, 42, 46, 48, 52, 55-57, 62, 66-67, 104-105, 142-143 and 145, Dawson et al teach a current drive circuit for driving a display comprising a control line(Select line, 210); a signal line(Data line, 220); a converting part(250, 260, 280) for converting a current to a voltage level and holding the same and a drive part(260, 270, 280) for converting the held voltage signal to a current signal and outputting the drive current(see figure 2; column 3, lines 11-68 and column 4, lines 1-5).

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As to claims 26, 27, 46 and 66, Dawson et al teach a pixel(290) having a receiving part for fetching the signal(current) supplied to the data line(220) when the scanning line(210) is selected(see figure 2; column 3, lines 11-68 and column 4, lines 1-5).

As to claims 2, 28, 42, 67 and 105, Dawson et al teach the converting part(250, 260, 280) having a transistor(260) with a control terminal connected to a capacitor(280); a first terminal(S) and a second terminal(D)(see figure 2).

As to claims 32, 35, 52 and 55, Dawson et al teach the converting and holding part and the drive part are the same transistor or first transistor(260)(see figure 2).

As to claims 36 and 56, Dawson et al teach a current driving circuit having a fourth transistor(240) between the first transistor(260) and the display element(290)(see figure 2).

As to claim 37 and 57, Dawson et al teach a display element(290) and the fourth transistor(240) are both connected to the first terminal(D) of the first transistor(260)(see figure 2).

As to claims 67, 105, 143 and 145, Dawson et al teach the converting part(250, 260, 280) having a conversion use insulating gate type field effect transistor(260) with a gate, a source, a drain, and a channel and a capacitor(280) connected to the gate(see figure 2).

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Allowable Subject Matter

7. Claims 14-17, 82-87, 120-125 and 149-154 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamagishi et al(6,501,466) teach an OLED display having a plurality of pixels consisting of a plurality of transistors and a capacitor.

Sekiya et al(6,583,775) teach a current driving display circuit having a plurality of transistors(TFT1-TFT3) and capacitors(Cs).

Dawson et al(6,307,322) teach an OLED display circuit having a plurality of pixels consisting of a transistor(104) and a capacitor(202).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

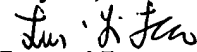
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

July 24, 2003



Lun-yi Lao

Primary Examiner